

Date: Thursday, 11/9/2006 4:38:31 PM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : STA 84 BRACKET  
 Job Number : 29403  
 Estimate Number : 11034  
 P.O. Number : N/A Part Number : D28031  
 This Issue : 11/9/2006 S.O. No. : N/A Drawing Number : D2803 REV B  
 Prsht Rev. : NC Project Number : N/A  
 First Issue : N/A Type : MACHINED PARTS Drawing Revision : B  
 Previous Run : 28200 Material : N/A  
 Due Date : 11/24/2006 Qty: 15 Um: Each  
 Written By :  
 Checked & Approved By :  
 Comment : Est. A00.11.06 New Issue EC  
 Est Rev:B Blanks Now Cut on Waterjet 06-06-14 JLM

## Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 M6061T6B0500X10000 6061-T6 Bar .50" x 10.0"



Comment: Qty.: 2.0125 f(s)/Unit Total: 30.1880 f(s)

6061-T6 Bar .50" x 10.0"

Material: 6061-T6 bar 10.00" x 0.50"

Batch: m102741

(15)

2.0 WATER JET FLOW WATER JET



Comment: FLOW WATER JET

1-Cut as per template DT8533

Dwg Rev: B

Prog Rev: B

m1 01 01 08

(15)

2-Deburr if necessary

3.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

Machine as per folio FA102

J.L. / En 07/01/18 (14)

4.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

J.L. / En 07/01/18 (14)

5.0 QC8 SECOND CHECK



Comment: SECOND CHECK

MS 07/01/22 14

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
07.01.19	8.1	QUANTIFY FOR ENGINEERING DISPOSITION. REQUIRES TEST <del>FOR</del> <sup>FIT</sup> WITH DZBOS STOP TO VERIFY DIM OF POCKET	CP	07.07.17	1	CP 07.01.19 PV QSI 042	07.07.17	

Part No: D2803-1 PAR #: N/A Fault Category: PROD - CNC NCR: Yes No DQA: 11 Date: 07.07.18  
 QA: N/C Closed: 11 Date: 07.07.18

NCR: <u>29403</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07.01.18	# 3.0	one part scrap. tool fell out of tool changer during bolting. Put a 0.026" Deep gauge in the part	QSI 042	Scrap <del>part</del> . Give to eng. for test fitting projects. No replace, I.D. part as scrap.	CP 07.01.18	07.07.11	QSI 042	07.01.18
07.01.19	3	POCKET FOR STOP IS 0.872 WIDE INSTEAD OF 0.875 $\pm 0.001$	CP 07.01.19 PV QSI 042	PARTS ARE ACCEPTABLE AS LONG AS DZBOS STOP CAN BE SUCCESSFULLY PRESS FIT. SEE 8.1 ABOVE	J.L 07.01.19	07.07.17	CP 07.01.19 PV QSI 042	07.07.17
07.07.16	9.0	<del>See w/o 33572 for press fitting test for DZBOS-1.</del> Test fit for 0.875 pocket	QSI 042	See w/o 33572 for press fitting test for DZBOS-1. one part was used	N/A CP 07.07.16	07.07.16	QSI 042	07.07.16

NOTE: Date & initial all entries

Date: Thursday, 11/9/2006 4:38:31 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STA 84 BRACKET

Job Number: 29403

Part Number: D28031

Job Number:



Seq. #:

Machine Or Operation:

Description:

6.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Tumble & Deburr

J.L. 07/01/17

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Er 07/01/17  
Cantos  
(14)

8.0

HAND FINISHING 1

HAND FINISHING RESOURCE #1



★ SEE STEP 8.1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

NO-STOP AFTER  
THIS STEP  
07/01/17

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: M.L.S.

Er 07/01/17  
(14)

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

07.07.17

Job Completion



U 07/01/17

POSITIVE RECALL

EFFECTIVE 07.01.17 AUTH GP

RELEASED 07.07.16 DATE GP

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/10/17	3	- 1 part pocket for stopper is too deep, tool pulled out of dimension .250 <sup>+0</sup> is .260 to .270 on 1 pocket..		07/17 See previous page.	J.L. 07/10/17			

NOTE: Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 29403
<b>Description:</b> Bracket		<b>Part Number:</b> D2803-1
<b>Inspection Dwg:</b> D2803	<b>Rev:</b> B	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

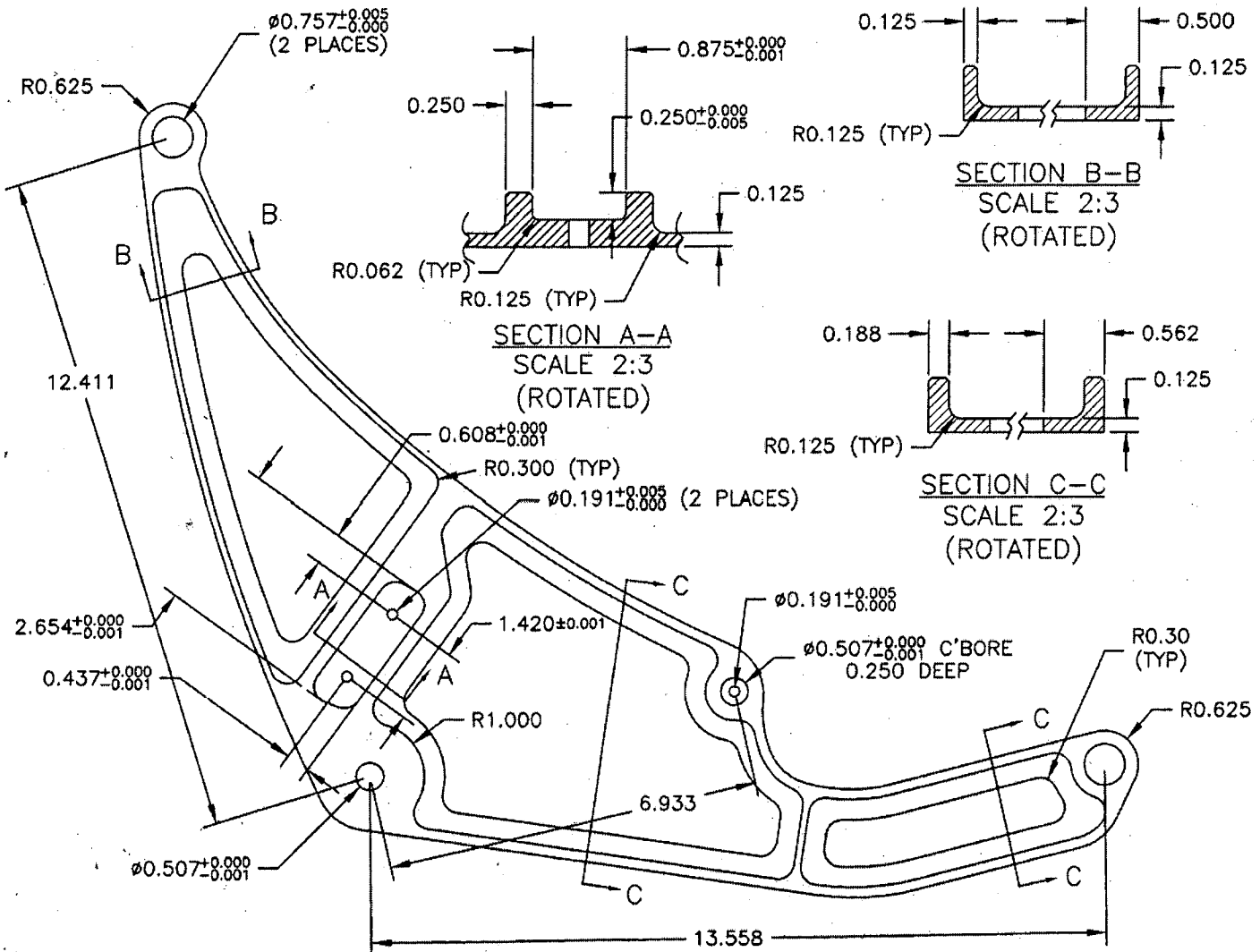
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
<del>42.625</del>	<del>+/-0.010</del>					
Ø0.757	+0.005/-0.000	.758	✓			
Ø0.191	+0.005/-0.000	.192	✓			
Ø0.507	+0.000/-0.001	.507	✓			
13.558	+/-0.010	13.558	✓			
Ø0.507	+0.000/-0.001	.5065	✓			
12.411	+/-0.010	12.410	✓			
2.654	+0.000/-0.001	2.654	✓			
0.437	+0.000/-0.001	.437	✓			
1.420	+/-0.001	1.420	✓			
6.933	+/-0.010	6.932	✓			
0.250	+/-0.010	.250	✓			
0.875	+0.000/-0.001	.874	✓			
0.250	+0.000/-0.005	.246	✓			
0.125	+/-0.010	.128	✓			
0.125	+/-0.010	.126	✓			
0.125	+/-0.010	.127	✓			
0.125	+/-0.010	.125	✓			
0.500	+/-0.010	.501	✓			
0.562	+/-0.010	.561	✓			
0.188	+/-0.010	.189	✓			

<b>Measured by:</b> JL	<b>Audited by:</b> JML	<b>Prototype Approval:</b>	N/A
<b>Date:</b> 07/01/16	<b>Date:</b> 07/01/17	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	05.04.25	New Issue	KJ/JLM	

**DART**

DESIGN	CP	DRAWN BY	CP	DART AEROSPACE LTD
				HAWKESBURY, ONTARIO, CANADA
CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	DRAWING NO. D2803
				REV. B SHEET 1 OF 2
DATE	04.11.22	TITLE	STA 84 BRACKET	SCALE 1:3
A	00.11.07	NEW ISSUE		
B	04.11.22	ADD CUTOUTS & -043/-044		

**RELEASED**05-03-11 *[Signature]***D2803-1 BRACKET (SHOWN). D2803-2 BRACKET (OPPOSITE)**

- 1) MACHINE PER DRAWING FILE "D2803.SLDPRT"
- 2) MATERIAL: 6061-T6 (QQ-A-200/8) OR (QQ-A-250/11) 0.500 THICK
- 3) DEBURR TO LEAVE R0.030 - 0.063 ON ALL EDGES
- 4) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

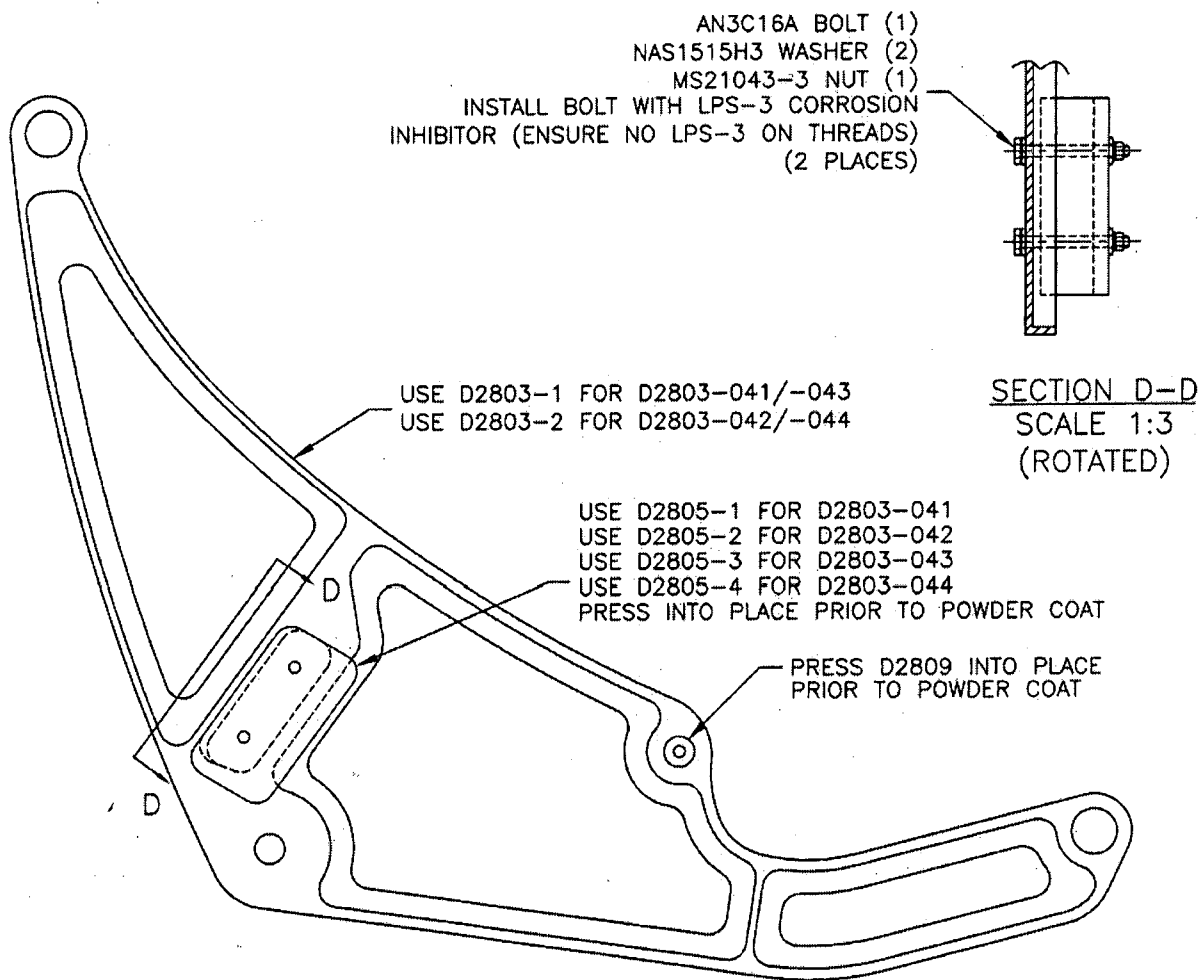
SHOP COPY  
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UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 29403

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**DART**

DESIGN	CP	DRAWN BY	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	DRAWING NO. D2803	REV. B SHEET 2 OF 2
DATE	04.11.22			TITLE STA 84 BRACKET	SCALE 1:3



**D2803-041/-043 BRACKET ASS'Y (SHOWN).**  
**D2803-042/-044 BRACKET ASS'Y (OPPOSITE)**

6) FINISH: POWDER COAT ASSEMBLY GLOSS WHITE (4.3.5.1) OR GREY SANDTEX (4.3.5.6)  
OR BLACK SANDTEX (4.3.5.7) OR GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3

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## Chris Provencal

---

**From:** David Shepherd [dshepherd@dartaero.com]  
**Sent:** January 19, 2007 11:02 AM  
**To:** 'Chris Provencal'  
**Subject:** RE: D2803 Bracket

Yes. Proceed as you have outlined below.

David

---

**From:** Chris Provencal [mailto:cprovencal@dartaero.com]  
**Sent:** Thursday, January 18, 2007 2:04 PM  
**To:** David Shepherd (David Shepherd)  
**Subject:** D2803 Bracket

D2803 bracket for the folding steps:

The pockets for the stop should be  $0.875+0.000/-0.001$  wide to fit a  $0.875+0.001/-0.000$  wide D2805 stop.

The pockets now (qty 13) are 0.872, so there would be an extra 0.002 of press fit. They said they should be able to re-machine, but they aren't too keen on doing so (mainly from the time it would take). I suspect there's also a danger of scrapping them if they mess something up in the re-machine.

I am thinking that we could try press fitting them regardless (we'd try just one first!). We'd have to make sure the holes still allow the AN3 bolts to pass through. Would you accept this deviation if the press fit is acceptable?

-Chris

--  
No virus found in this incoming message.  
Checked by AVG Free Edition.  
Version: 7.1.410 / Virus Database: 268.16.14/637 - Release Date: 1/18/2007

--  
No virus found in this outgoing message.  
Checked by AVG Free Edition.  
Version: 7.1.410 / Virus Database: 268.16.14/637 - Release Date: 1/18/2007

19/01/2007



Date: Monday, 16/07/2007 3:49:17 PM  
 User: Linda Lacelle

# Process Sheet

Customer	: CC-DAR01 Dart Aerospace Ltd.	Drawing Name	: REWORK
Job Number	: 33572		
Estimate Number	: 10804		
P.O. Number	:	Part Number	: D2803041
This Issue	: 16/07/2007 S.O. No. :	Drawing Number	: D2803041
Prsht Rev.	: NC	Project Number	:
First Issue	: / /	Drawing Revision	:
Previous Run	: 00015	Material	:
	Type : MACHINED PARTS	Due Date	: 23/07/2007
Written By	: <u>U</u>	Qty:	1 Um: Each
Checked & Approved By	: <u>U</u>		
Comment	:		

Additional Product

Job Number:



Seq. #:

Machine Or Operation:

Description :

1.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1  
 PRESS STOP D2805-1 B 29905

SB 07/07/16 (1)

2.0

D28051

Stop



Comment: Qty: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)  
 Stop

SB 07/07/16 (1)

3.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SB 07/07/16 (1)

Job Completion



REFERENCE ONLY